First Quarter of FY 1998 Report (October 1998 through December 1998)

CALIFORNIA BAY-DELTA ECOSYSTEM RESTORATION FUND

April 16, 1999

Bureau of Reclamation
United States Department of the Interior

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INTRODUCTION

House Report 105-190, which accompanied H.R. 2203, the FY 1998 Energy and Water Development Appropriations Bill, requires that the Department of the Interior submit a quarterly report to the Committees on Appropriations on how the funds appropriated for the California Bay-Delta Ecosystem Restoration program are being utilized. The report is to include a description of each project to be undertaken, its cost, and the agency to which funds were provided to carry out the project. This First Quarterly Report covers activities undertaken during the period of October 1, 1998 through December 31, 1998 describes activities undertaken within the Federal Bay-Delta Account funding for fiscal year 1999.

The Bureau of Reclamation, working with the other Federal agencies participating in the CALFED Bay-Delta Program, prepared the following report in response to that requirement. A similar report will be prepared following the conclusion of each quarter and provided to the Committees and other interested parties.

Bay-Delta Program

	FY 98/99	FY 98/99	FY 98/99
	Allocated	Obligated	Expended
	Anocaied	Obligated	Expended
Fish Screen Improvements	2,539	1,639	14
Fish Passage Improvements	42,353	2,437	349
Habitat Restoration in Floodplains and Marshes	41,652	32,527	3,609
River Channel Changes	14,884	9,624	243
Improved Instream Flows	14,500	14,450	0
Water Quality and Temperature Improvement	8,803	.5,003	691
Introduced and Undesirable Species Control	1,250	1,250	0
Improved Fish Management and Hatchery Operations	625	625	0
Watershed Management	4,198	2,253	- 61
Monitoring, Permit Coordination, and Other Special Support	9,556	3,023	1,235
Miscellaneous Expenses/Administration	9,469	222	222
Pending April 16, 1999 due date for Public Solicitation Process	10,171	0	. 0
GRAND TOTAL	160,000	73,053	6,424

FIRST QUARTER'S STATUS FOR THE FEDERAL BAY-DELTA ACCOUNT

This section provides a description of each of the projects and programs that have been funded or recommended for funding from the Federal Bay-Delta account, as well as a summary of accomplishments and obligations during the first quarter of FY 1999. All projects or programs listed here have been reviewed and recommended through the CALFED process - review and comment by the Ecosystem Roundtable, Bay Delta Advisory Council, and the CALFED Policy Group with final authorization provided through the Department of the Interior. A summary table showing the status of funds for each project and program as of December 31, 1998, is provided as Appendix A.

Fish Screen Improvements:

CALFED Recommended level of fund	ing:	\$2,539,000
Funds obligated FY 98:		\$1,639,000
Funds expended FY 98:		. \$0
Funds obligated FY 99:		\$0
Funds expended FY 99:	19. 🕶	- \$14,381

1) Project Title: Woodbridge Fish Screen and Passage

CALFED Recommended level of funding:		\$1,575,000
Funds obligated FY 98:		\$1,575,000
Funds expended FY 98:		\$0
Funds obligated FY 99:	2	\$0
Funds expended FY 99:		\$14,381

Funding provided to: U.S. Bureau of Reclamation

Project Description: The primary goals for this program on the Lower Mokelumne River are to implement key elements of existing resource management plans of CALFED, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game to increase substantially fall-run chinook salmon and steelhead populations, enhance critical and limiting aquatic habitats, and restore riparian ecosystem integrity and diversity. Three specific tasks will be funded through the Bay-Delta Ecosystem Restoration Appropriation: Task One involves the environmental clearance and permitting for fish passage improvements at Woodbridge Dam; Task Two provides the final design of fish passage improvements at Woodbridge Dam; and Task Three provides the final design for the Woodbridge Irrigation District and the North San Joaquin Water Conservation District fish screen improvements. The U.S. Bureau of Reclamation will work in coordination with the Woodbridge Irrigation District and the City of Lodi to accomplish this project.

Expected Project Completion Date: December 31, 1999

First Quarter Accomplishments:

The MRTAC Workgroup and sponsors (WID & Lodi) have completed a portion of the EIS/EIR regarding alternatives to the proposed project. Fourteen alternatives were evaluated and five were selected to be carried forward in the EIS/EIR. Future meeting dates are scheduled.

2) **Program Title:** Small Diversion Fish Screens Program

CALFED Recommended level of funding:	\$900,000
Funds obligated FY 98:	\$0
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: Natural Resource Conservation Service

Project Description: The Natural Resource Conservation Service (NRCS) oversees an existing small fish screen program which works with local organizations and diverters to prioritize and screen small diversions from the Sacramento and San Joaquin Rivers and their tributaries. Funding requested under the Bay-Delta Ecosystem Restoration Appropriation will allow NRCS to expand the program. This program will be coordinated with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, state and local agencies, other local groups such as the Family Water Alliance, and local watershed conservancies.

Project Selection: February 26, 1998

Final Project Selection: Pending negotiations

Interagency Agreement Signed by Applicant: Pending negotiations.

<u>Funds Obligated in Federal Financial System:</u> Pending outcome of the negotiations

Expected Project Completion Date: Pending program development

First Quarter Accomplishments:

No report provided.

3) Project Title: Richter Brothers Anadromous Fish Screen

CALFED Recommended level of funding:	\$49,000
Funds obligated FY 98:	\$49,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: Richter Brothers operate an unscreened 25 cubic feet per second diversion on the Sacramento River near Knights Landing. This project includes evaluating screening alternatives, completing environmental documentation, obtaining permits, and preparing design plans. The U.S. Bureau of Reclamation will coordinate with the Richter Brothers to accomplish this project.

Expected Project Completion Date: January 31, 1999

First Quarter Accomplishments:

Obtained aerial photographs to compliment physical surveys; attended demonstration of USBR Flat Plate Screening; initiated work on background environmental documentation; and initiated conceptual layouts of alternatives.

4) Project Title: Boeger Family Farms Fish Screen

CALFED Recommended level of funding:	\$15,000
Funds obligated FY 98:	\$15,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: Boeger Family Farm proposes to install fish screens on its pumping plant on the Sacramento River near Colusa. The fish screen would reduce entrainment of priority species at the Boeger Family Farms pumping plant. Priority species include steelhead and various chinook salmon runs (winter-run, spring-run, and late-fall run). The U.S. Bureau of Reclamation will work with the Boeger Family Farm to accomplish this project.

Expected Project Completion Date: January 31, 1999

First Quarter Accomplishments:

Site surveys for both engineering and biological evaluations have been completed. Fish screens alternatives have been developed and are currently being analyzed. Draft CEQA document is nearly complete.

Fish Passage Improvements:

CALFED Recommended level of funding:	\$8,325,000
Funds obligated FY 98:	\$2,420,970
Funds expended FY 98:	\$332,970
Funds obligated FY 99:	\$16,264
Funds expended FY 99:	\$16,264

1) **Program Title:** Fish Passage Program

CALFED Recommended level of funding:	\$8,000,000
Funds obligated FY 98:	\$2,095,970
Funds expended FY 98:	\$7970
Funds obligated FY 99:	\$16,264
Funds expended FY 99:	\$16,264

Funding provided to: U.S. Bureau of Reclamation

Project Description: This program will identify and implement additional fish passage projects at locations such as McCormick-Saeltzer Dam on Clear Creek and at Coleman National Fish Hatchery on Battle Creek. The U.S. Bureau of Reclamation will coordinate with CALFED staff, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and other interested agencies or private entities to meet the goals of this program.

A) Project Title: Proposal Solicitation Package (PSP)

CALFED Recommended level of funding:	\$5,912,030
Funds obligated FY 98:	\$0
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding Provided to: Bureau of Reclamation

Project Description: In May 1998, CALFED issued a Proposal Solicitation Package requesting proposals to assess fish passage problems and associated problems with migration delays, stranding, and straying and to identify solutions. The assessment of problems and identification of solutions can be accomplished through cooperative efforts to conduct the assessments necessary to identify small diversion dams which are appropriate for removal or consolidation and small diversion dams which need to be replaced or modified with fish-friendly structures. Cooperative efforts can include developing expert work groups to work with local efforts and programs. Proposals can address the entire Bay-Delta watershed or can concentrate on smaller areas within the geographic area of consideration.

Project Selection Process: April 2, 1998
Final Project Selection: September 14, 1998

First Quarter Accomplishments:

No report provided.

B) <u>Project Title</u>: Stanislaus River Channel Restoration

CALFED Recommended level of funding:	\$1,038,000
Funds obligated FY 98:	\$1,038,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding Provided to: U.S. Fish and Wildlife Service

Project Description: The primary fishery objective of this project is to remove salmon predator habitat by filling a broad (10.65 acres), relatively shallow (3 to 10 foot deep) instream pond, thereby improving survival for out-migrating smolts. Additional project benefits include improved salmon spawning and rearing habitat, improved river dynamics, enhanced floodplain and riparian vegetation habitat. The salmon habitat improvements will be accomplished by reconfiguring spawning beds and floodplain to better conform with the existing river flow regime. This project was identified by the Integration Panel as a high priority project and selected by both the stakeholder groups and the Policy Group as a

directed program.

Expected Project Completion Date: September 30, 2001

First Quarter Accomplishments:

No report provided.

C) <u>Project Title</u>: Tuolumne River Setback Levees

CALFED Recommended level of funding:	\$655,000
Funds obligated FY 98:	\$655,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding Provided to: U.S. Fish and Wildlife Service

<u>Project Description</u>: This project is designed to restore and protect fall-run chinook salmon habitat on the Tuolumne River that was affected by flooding and sand and gravel mining operations within the floodplain by creating set back levees, floodplains, and riparian areas. It is designed to restore the Mining Reach to a more natural channel morphology. This project was identified by the Integration Panel as a high priority project and selected by both the stakeholder groups and the Policy Group as a directed program.

Expected Project Completion Date: September 30, 2001

First Quarter Accomplishments:

No report provided.

D) <u>Project Title</u>: Fish Passage Project at Battle Creek

CALFED Recommended level of funding:	\$395,000
Funds obligated FY 98:	\$395,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

<u>Funding Provided to</u>: California Department of Water Resources (DWR)

<u>Project Description</u>: The funding is provided to DWR to conduct a
reconnaissance investigation and preliminary design for winter-run, spring-run
chinook, and Steelhead passage facilities as an important component of the BayDelta solution. The goal of the project is to have preliminary designs and
environmental work substantially complete so the final design can be completed
and the construction process can proceed in the phased restoration program being
developed by the Battle Creek Working Group. This project was identified by the
Integration Panel as a high priority project and selected by both the stakeholder
groups and the Policy Group as a directed program.

Expected Project Completion Date: April 15, 2000

First Quarter Accomplishments:

No report provided.

2) Project Title: Anderson-Cottonwood Irrigation District (ACID) Fish Passage Project

CALFED Recommended level of funding:	\$325,000
Funds obligated FY 98:	\$325,000
Funds expended FY 98:	\$325,000
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: ACID operates a diversion dam on the Sacramento River approximately 3.5 miles south of Keswick Dam. Problems of fish passage and migration of chinook salmon and steelhead have been documented for years. ACID proposes to correct these problems through construction of fish-friendly facilities. This proposal is for the first phase of work (completion of design documents, environmental documentation, and construction bid documents). Facilities will be constructed in a separate phase of work. Funding will be provided to ACID for accomplishment of this task.

Expected Project Completion Date: March 31, 1999

First Quarter Accomplishments: Conducted workshop with ACID Fish Passage Review Team; development of project instructions for team; initiate structural analysis and other final design work on fish ladders; submitted permit applications and coordination letters; conducted public scoping meeting; attended preapplication with Corps of Engineers; and continued work on Administrative Draft EA/IS.

Habitat Restoration in Floodplains and Marshes:

CALFED Recommended level of funding:	\$32,842,000
Funds obligated FY 98:	\$32,842,000
Funds expended FY 98:	\$3,827,949
Funds obligated FY 99:	(\$315,023)
Funds expended FY 99:	(\$219,324)

1) Program Title:

Floodplain Restoration/Habitat Restoration on Existing Conservation

Lands Program

CALFED Recommended level of funding: \$14,000,000
Funds obligated FY 98: \$14,000,000
Funds expended FY 98: \$0
Funds obligated FY 99: \$5,989

Funding provided to: U.S. Fish and Wildlife Service

Project Description: This program will focus on opportunities to expand floodways and riparian corridors, providing greater flood management flexibility and ecosystem benefits. It will use the priority species to identify and restore lands within the floodplains of the major rivers or their tributaries. An emphasis will be placed on lands flooded in January 1997. Conservation easements will be given a preference if they meet ecosystem restoration objectives. This program will also implement habitat restoration at existing sites already in conservation ownership. The U.S. Fish and Wildlife Service will work with the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, and the U.S. Bureau of Land Management.

Project Selection Process: April 2, 1998
Final Project Selection: September 14, 1998

First Quarter Accomplishments:

No report provided.

2) Project Title: San Joaquin Floodplain Acquisition and Riparian Restoration

CALFED Recommended level of funding:	\$10,647,000
Funds obligated FY 98:	\$10,647,000
Funds expended FY 98:	\$7,778
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$56,145

Funding provided to: U.S. Fish and Wildlife Service

Project Description: Acquisition, preservation, and restoration of 6,169 acres of fish and wildlife habitat on the San Joaquin River floodplain for the San Joaquin River National Wildlife Refuge. Benefits to migratory birds and other bird species, splittail, and San Joaquin fall-run chinook. Provides some flood protection through widening of floodplain and transient storage of flood waters. The Fish and Wildlife Service is combining Bay-Delta funding with funds from other sources to cover the total cost of this project.

Expected Project Completion Date: December 31, 1998 (to be extended to October 31, 1999 pending CALFED agreement.)

First Quarter Accomplishments:

Vertebrate census data analysis has begun and species lists have been updated with the additional species that have been documented. Since the Vierra property has recently been purchased, site clean-up will commence on this parcel and be completed during the next quarter.

3) Project Title: Cosumnes River Floodplain Acquisition

CALFED Recommended level of funding:	\$3,500,000
Funds obligated FY 98:	\$3,500,000
Funds expended FY 98:	\$3,500,000
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: The Nature Conservancy (TNC)

Project Description: The Nature Conservancy (TNC) and the Wildlife Conservation Board (WCB) are collaborating to acquire three properties (Whaley, Denier, and Park) from private willing sellers. The title of these properties will vest either with WCB, the State Lands Commission, or TNC and will remain part of the Cosumnes River Preserve. On June 15, 1998, the Policy Group forwarded a request for \$3.4 million to fund the purchase of Denier and Park properties. TNC was provided an additional \$100,000 in order to purchase 285 acres of the Whaley property with an escrow closing date of July 10, 1998. The properties will become part of the Cosumnes River Preserve, a 10-year-old, multi-partner effort that has successfully protected and restored riparian forest, seasonal wetland, and tidal habitats along the Cosumnes River. The project ranked among the highest priority project in the State's 1997 Request for Proposal. This project had originally been selected for funding through the State's Proposition 204 funds. However, the State was unable to provide the funds required by the close of escrow for the properties. The Policy Group, with concurrence from the BDAC and Ecosystem Roundtable, requested funding from the Federal Bay-Delta Account.

Expected Project Completion Date: December 31, 1998

First Quarter Accomplishments:

CALFED funds partially funded acquisition of the Park, Whaley and Denier properties. Acquisition of these properties substantially added to the Consumnes River Preserve, a 10-year-old multi-partner effort that has successfully protected and restored riparian forest, seasonal wetland, and tidal habitat along the Consumnes River.

4) Project Title: Prospect Island Habitat Protection Project

CALFED Recommended level of funding:	\$2,000,000
Funds obligated FY 98:	\$2,000,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$22,365

Funding provided to: U.S. Army Corps of Engineers

Project Description: The U.S. Army Corps of Engineers and the State of California, Department of Water Resources are co-sponsors of this project, which is designed to restore 1,200 acres of fresh-water tidal marsh and riparian habitat in the Delta. This project would provide habitat that may be beneficial as rearing habitat for fry and juvenile chinook salmon; spawning and rearing habitat for resident Delta Fish, such as Delta Smelt and splittail; and habitat for waterfowl and shorebirds. The U.S. Fish and Wildlife Service plans to include the project in its proposed North Delta National Wildlife Refuge. The Prospect Island Protection Project will prevent further loss of the valuable riparian ecosystem on the island by repairing levees and returning the island to its pre-flood condition.

Expected Project Completion Date: September 30, 1999

First Quarter Accomplishments:

Repair of Miner Slough levee was completed. Pumping floodwater out of the island was halted at approximately 1.75 billion gallons because of fund limitations. Cross levee breach was repaired. Further repair of cross levee and sandbagging will follow.

5) Program Title: Habitat Restoration/Flood Control Bypasses Program

CALFED Recommended level of funding:	\$1,200,000
Funds obligated FY 98:	\$1,200,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Army Corps of Engineers (COE)

Project Description: The current flood control bypasses along the Sacramento River provide seasonally flooded habitat, but also result in stranding of juvenile salmonids and other Delta fish. This program will evaluate restoration needs and opportunities to improve habitat, reduce stranding, and to improve connectivity with the Sacramento River and the North Delta. Elements to be evaluated would include: a) improve existing habitats; b) improve streamflows; c) improve wetland, riparian, slough, agricultural, and shaded riverine aquatic habitats; d) eliminate fish barriers; e) reduce fish entrainment and stranding; and f) develop wildlife and fisheries friendly levee maintenance programs. The proposed actions will be developed to avoid conflicts with existing and future flood control needs. The U.S. Army Corps of Engineers will work with CALFED Staff to develop this program in accordance with Ecosystem Roundtable and Policy Team requirements.

<u>Expected Project Completion Date:</u> Still developing the program with CALFED staff. **First Quarter Accomplishments:**

Currently working on resource plan to initiate project schedule and budget. Coordinating solicitation process. Development of scope of work and criteria is continuing.

6) Project Title: Napa River Wetlands Acquisition

CALFED Recommended level of funding:	\$1,000,000
Funds obligated FY 98:	\$1,000,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: This project will allow acquisition of approximately 68 acres of diked, historic wetlands along the Napa River. The land will be restored to estuarine, riparian, and aquatic habitats through a combination of floodplains and marshplains. This project targets the primary objectives of the CALFED program by acquiring lands which were historically part of the San Francisco Bay Area wetland system and which directly influence the survival of several endangered species. These lands are at high risk of conversion to vineyard and/or urbanization. This project is a phased approach to land acquisition and restoration. Once acquired by the Napa County Land Trust, the title to these properties will be simultaneously conveyed to the California Department of Fish and Game, along with the responsibility for maintenance thereof. Restoration activities will be undertaken by the California Department of Fish and Game and the U.S. Army Corps of Engineers.

Expected Project Completion Date: September 30, 2000

First Quarter Accomplishments:

Slow progress on acquisition of property.

7) Project Title: Bear Creek Floodplain Restoration Demonstration Project

CALFED Recommended level of funding:	\$334,000
Funds obligated FY 98:	\$334,000
Funds expended FY 98:	\$319,606
Funds obligated FY 99:	(\$315,023)
Funds expended FY 99:	(\$303,249)

Funding provided to: U.S. Fish and Wildlife Service

Project Description: Feasibility analysis for restoring floodplain function along the San Joaquin River and Bear Creek on public lands to provide flood protection benefits, enhance shaded riverine aquatic habitat and wetlands, and improve instream habitat for the San Luis National Wildlife Refuge Complex. Benefits to migratory birds, San Joaquin fall run chinook salmon, and several other fish species are expected.

Expected Project Completion Date: March 31, 1999

First Quarter Accomplishments:

Contractor has reviewed biological data obtained from San Luis NWR and Grant Valley State Park files. Biological resources have been summarized in a tabular format. US

Army Corps of Engineers(COE) data from the San Joaquin River comprehensive study has been obtained to improve accuracy and reliability of hydrologic analysis. Conducted survey work and obtained survey data from other agencies needed to complete the project basemap. Contract modification funded additional underwater survey work on the Salt Slough. Preparations for development of project hydrology to run the UNET model have been made.

8) Project Title: Cache Slough Habitat Enhancement

CALFED Recommended level of funding: Funds obligated FY 98:	\$85,000 \$85,000
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: Reclamation District 2060 proposes restoration of approximately 2,000 linear feet of levee bank where erosion has destroyed shaded riverine aquatic habitat and created erosion pockets. Instead of utilizing traditional erosion repair (i.e., fill and riprap), the Reclamation District 2060 plans to stabilize the bank and encourage habitat which will benefit target priority species including the Delta smelt. The U.S. Bureau of Reclamation will work with Reclamation District 2060 in accomplishing this project.

Expected Project Completion Date: May 31, 1999

First Quarter Accomplishments:

Some of the erosion sites considered for this project were being evaluated for repair by the US Army Corps of Engineers (COE), thereby delaying the project.

9) Project Title: Regional Wetlands Goals Project

CALFED Recommended level of funding:	\$76,000
Funds obligated FY 98:	\$76,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Environmental Protection Agency (EPA)

Project Description: This project is a multi-agency, interdisciplinary planning effort whose main objective is to identify the kinds, amounts, and distribution of wetlands and related habitats needed to sustain diverse and healthy communities of fish and wildlife in the San Francisco Bay area. The habitat restoration goals for this project will provide the biological basis for regional wetlands management and will provide specific information required by the CALFED planning process to meet restoration goals throughout the San

Francisco Bay. EPA is working with the San Francisco Estuary Institute to accomplish the goals of this project.

Expected Project Completion Date: September 30, 2002

First Quarter Accomplishments:

No reported provided.

River Channel Changes:

CALFED Recommended level of funding:	\$9,624,010
Funds obligated FY 98:	\$9,624,010
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$242,800

1) Project Title: Liberty Island Acquisition

CALFED Recommended level of funding:	\$8,577,000
Funds obligated FY 98:	\$8,577,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Fish and Wildlife Service

Project Description: Acquisition of Liberty Island (4,760 acres) for future restoration of native Delta habitats and species. Strategic location in north Delta at southern end of Yolo Bypass provides potential wetlands, shaded riverine aquatic habitat, instream habitat for winter run, Delta smelt, splittail, and other species. Funding will cover full acquisition cost. Restoration funding not identified.

Expected Project Completion Date: February 1999 (to be extended to October 31, 1999 pending CALFED agreement.)

First Quarter Accomplishments:

No report provided.

2) Project Title: Sedimentation Movement and, Availability and Monitoring in the Delta

CALFED Recommended level of funding:	\$1,047,010
Funds obligated FY 98:	\$1,047,010
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds obligated FY 99:	\$242,800

Funding provided to: U.S. Geological Survey

Project Description: Sediment transport research and monitoring at several sites in Suisun Bay and the Delta to help guide water quality and restoration planning activities.

Recommend funding for the first 2 years of the project in the amount of \$587,010 (total estimated project cost is \$1,046,000).

Expected Project Completion Date: September 30, 2000

First Quarter Accomplishments:

No report provided.

Improved Instream Flows:

CALFED Recommended level of funding:	\$14,500,000
Funds obligated FY 98:	\$14,500,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

1) Program Title: Environmental Water Acquisition Program

CALFED Recommended level of funding:	\$14,450,000
Funds obligated through December 31, 1998:	\$14,450,000
Funds expended through December 31, 1998:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: The Environmental Water Acquisition Program will be guided by policy principles being developed by the stakeholders through the Ecosystem Roundtable. These principles will focus on fostering local partnerships, ensuring adequate evaluation, avoidance and mitigation of any potential local economic effects, and developing activities which provide the greatest ecosystem benefit relative to cost. The Ecosystem Roundtable is currently in the process of developing these principles. The program will focus on activities to improve instream flows to benefit the priority species in cooperation with the existing Environmental Water Acquisition Program operating under the Central Valley Project Improvement Act. Activities under this program can include multi-year water transfers or acquisitions, funding for water use efficiency measures to allow increases instream flows, and funding for foregone power revenues in exchange for increased bypass flows. The U.S. Bureau of Reclamation will coordinate this program with CALFED program staff to accomplish the goals of this program.

First Quarter Accomplishments:

No report provided.

2) **Project Title:** Environmental Water Acquisition Study

CALFED Recommended level of funding:	\$50,000
Funds obligated FY 98:	\$0
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: In order to improve coordination between CALFED and CVPIA water acquisition programs, CALFED will conduct a review of the Water Acquisition Program being implemented under the mandate of Section 3406(b)(3) of the Central Valley Project Improvement Act. The objective of this study is to determine what is needed to develop and implement an effective, coordinated, long-term water acquisition program in a timely fashion. Reclamation proposes hiring a contractor to prepare an assessment of the CVPIA Water Acquisition program. The contractor will interview the CVPIA Water Acquisition Program manager as well as other managers of similar water purchase/transfer programs (similar programs include: the State Drought Water Bank, the State Water Project Supplemental Water Purchase Program, and the Yakima River Basin Water Enhancement Program). After they've analyzed the data collected, the contractor will prepare a comprehensive report detailing their findings.

First Quarter Accomplishments:

No report provided.

Water Quality and Temperature Improvement:

CALFED Recommended level of funding:	\$5,003,000
Funds obligated FY 98:	\$4,737,000
Funds expended FY 98:	\$17,594
Funds obligated FY 99:	\$266,000
Funds expended FY 99:	\$673,966

1) Project Title: Evaluation of Selenium Sources, Levels, and Consequences in the Delta

CALFED Recommended level of funding:	\$1,589,000
Funds obligated FY 98:	\$1,589,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$225,420

Funding provided to: U.S. Geological Survey

Project Description: This 3-year study will provide a quantitative description of the different sources of selenium concentrations in the Bay-Delta, a determination of how changes in sources may affect selenium tissue concentrations in primary consumers, a linkage of selenium concentrations in primary consumers to uptake by predators, a direct determination of whether selenium affects reproduction and development in sturgeon, models which can forecast outcomes of alternative selenium remediation/restoration strategies, and a baseline of monitoring data.

Expected Project Completion Date: June 30, 2001

First Quarter Accomplishments:

Comparison of speciation among the Bay-Delta and the San Joaquin River was continued

during low inflow cruise in October 1998. Analysis in progress. Water sampling, monthly, at Vernalis and Freeport began in November 1998. Continued work on conceptual models of source, speciation, transport, fate and effect.

2) **Project Title:** Assessment of Organic Matter in the Habitat and Its Relationship to the Food Chain

CALFED Recommended level of funding:	\$1,400,000
Funds obligated FY 98:	\$1,400,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$381,573

Funding provided to: U.S. Geological Survey

Project Description: Research proposal for a comprehensive assessment of the production, import, utilization, and export of the organic matter that serves as food resource for fish in their early life stages. Lower tropic level ecosystem functions potentially limit fish population growth in the Delta. Benefits to multiple fish species. First year of funding was recommended (total estimated project cost is \$1,400,000 for a 3-year project).

Expected Project Completion Date: April 30, 1999

First Quarter Accomplishments:

The first sampling cruise of this project was conducted from October 12-15, 1998. Collecting water, seston, zooplankton, and sediment samples from 10 sites across the Delta, representing the full spectrum of habitat types. The results confirm a basic hypothesis of the study: there are large spatial variations in the quantity and quality of the organic matter across the gradient of habitat types within the Delta.

3) Project Title: Bacterial Treatment of Selenium in the Panoche Drainage

CALFED Recommended level of funding:	\$1,149,000
Funds obligated FY 98:	\$1,149,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$66,973

Funding provided to: U.S. Bureau of Reclamation

Project Description: The Algal-Bacterial Selenium Removal Facility has been operating for a year in the Panoche Drainage District near Firebaugh. The facility consists of two identical systems in which algae are grown, harvested, and then used as a bacterial substrate for selenium reduction from subsurface agricultural drainage water. Funding of this project will allow the continued operation of the facility for 3 years. Panoche Drainage District and Enrico Farms, Inc., are hosting the facility. Funding will

be provided to the University of California, Berkeley (Lawrence Berkeley Laboratory) for accomplishment of this task.

Expected Project Completion Date: September 30, 2001

First Quarter Accomplishments:

In October installation of a floating surface cover on the North Reduction Pond was completed. Larger diameter piping was installed for one hydraulic transfer. The original piping had lost capacity due to excessive scaling. The flow treated by the Mode 2 Algal-Bacterial Selenium Removal (ASBR) System was gradually increased 170% from 4,600 to 7,900 gallons per day during September through November. The Mode 1 ASBR System flow has been maintained at 4,600 gallons a day. Weekly samples of the influent and effluent of each pond of the ASBR Systems have been collected and analyzed. Began testing and adapting to the ASBR samples, standard methodologies for determination of unfiltered total selenium. Invertebrate sampling was conducted for the purpose of genus identification and selenium analysis.

4) Project Title: Sand and Salt Creek Watershed Project

CALFED Recommended level of funding:	\$599,000
Funds obligated FY 98:	\$599,000
Funds expended FY 98:	\$17,594
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: This watershed management project is designed to assist private landowners in addressing non-point source pollution associated with grazing, almond orchards, and irrigated cropland. Management practices designed to reduce surface runoff containing pesticide residues and sediments will be implemented at twenty selected sites. In addition, grade stabilization structures will be constructed within the watershed. The U.S. Bureau of Reclamation will coordinate this project with the Colusa County Resource Conservation District and the Natural Resources Conservation Service. Expected Project Completion Date: December 31, 1999

First Quarter Accomplishments:

Held introductory Public Meeting and Steering Committee Meeting, prepared responsiveness summary, and developed rating system.

5) Project Title: Integrated Pest Management in Suisun Bay Program

CALFED Recommended level of funding:	\$266,000
Funds obligated FY 98:	\$0
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$266,000
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: The program builds on an existing pilot project to educate the public and change their behavior regarding urban pesticide use to move towards integrated pest management. This program uses targeted public information and educational programs developed in the pilot project. This program is designed to reduce runoff of pesticides from this urban area into the Delta near Suisun Bay and will include monitoring and evaluation of effectiveness. The U.S. Bureau of Reclamation will work with the Central Contra Costa Sanitary District to develop this program.

Expected Project Completion Date: August 31, 2001

First Quarter Accomplishments:

Drafted a Project Evaluation and Monitoring Plan and Quality Assurance Project Plan and submitted to the Bureau of Reclamation for CALFED review and approval. Issued a request for proposals for training consultants to train store employees in person and to develop a video as a supplemental training tool. Recruited 13 stores within central Contra Costa County to participate in the IPM Partnership Project and identified two additional stores to recruit. Drafted five new project fact sheets on the following topics: cockroaches, spiders, the proper use and disposal of pesticides, lawn care, and Managing Pests Naturally with a Healthy Garden.

Introduced and Undesirable Species Control:

CALFED Recommended level of funding:	\$1,250,000
Funds obligated FY 98:	\$1,250,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

1) Program Title: Exotic Species Control Program

CALFED Recommended level of funding:	\$1,250,000
Funds obligated FY 98:	\$1,250,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Fish and Wildlife Service

Project Description: This program will identify and implement measures to prevent additional introduction of exotic, non-native aquatic species. This program will develop an overall strategy which seeks to control various sources of introductions such as ballast water and intentional introductions. The program May also identify specific needs to control previously introduced species if experts can identify effective remedial control measures. The U.S. Fish and Wildlife Service will work with CALFED staff to develop

this program.

Expected Project Completion Date: September 30, 2000

First Quarter Accomplishments:

No report provided.

Improved Fish Management and Hatchery Operations:

CALFED Recommended level of funding:	\$625,000
Funds obligated FY 98:	\$625,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

1) Project Title: Evaluation of Tagging Data

CALFED Recommended level of funding:	\$625,000
Funds obligated FY 98:	\$625,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	. \$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: This project consists of two integrated components. The first component will evaluate existing coded wire tag and recovery data from the Central Valley, look at hatchery produced salmon contribution toward commercial and recreational harvest, and develop parameters associated with constant fractional or mass marking programs for fish harvest. The second component will demonstrate the feasibility of marking large numbers of fish for release into Central Valley waters. Increasing the tagging levels will provide a much greater definition of juvenile salmon inland distribution, migration rates, growth rates, and origin of fish captured. The U.S. Bureau of Reclamation will work with Northwest Marine Technology, Inc. and the California Department of Fish and Game to accomplish the project goals. Expected Project Completion Date: December 31, 2000

First Quarter Accomplishments:

A meeting was held with representatives of the Washington Department of Fish and Wildlife to discuss their view with respect to selective fisheries and to develop a list of factors that might need to be considered in development of the report. Contract language was finalized with the University of Idaho for the participation of Dr. Ken Newman in the project. Bailey Environmental has obtained all coded wire tag release information from the California Department of Fish and Game and has some of the juvenile recovery information as well. All adult recovery information is currently in hand and is undergoing QA/QC with the PSMFC Regional Mark Information center data and is being consolidated into a single database. In addition, Bailey Environmental is continuing to

obtain data on juvenile recoveries from the U.S. Fish and Wildlife Service.

Engineering design and testing continues on the prototype Marking and Tagging System (MATS). Progress is steady but slow, toward a version that will go into production. The prototype MATS machine was demonstrated to the State of Oregon in December at the O Oregon Department of Fish and Wildlife Regional Office.

Watershed Management:

CALFED Recommended level of funding:	\$2,25	3,000
Funds obligated FY 98:	\$37	1,000
Funds expended FY 98:	\$4	2,417
Funds obligated FY 99:		\$0
Funds expended FY 99:	\$1	8,399

1) Program Title: Watershed Restoration Planning and Implementation Program

CALFED Recommended level of funding:	\$1,550,000
Funds obligated FY 98:	\$1,550,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Environmental Protection Agency

Project Description: A program to promote locally-led efforts to develop comprehensive restoration plans for key tributaries of the Central Valley and Bay-Delta Watershed. This program will fund the development and implementation of restoration projects or plans by new or existing watershed groups. To promote watershed stewardship throughout the ecosystem and to support an increased understanding of the linkages with the upper watershed, geographic scope of the watershed program will include the upper watershed and the local watersheds below the Delta. Efforts under this program will be coordinated through the CALFED Watershed Management Program. Expected Project Completion Date: September 30, 2002

First Quarter Accomplishments:

No report provided.

2) **Project Title:** Improvement/Sediment Stabilization on Deer, Mill and Antelope Creeks (Lassen National Forest)

CALFED Recommended level of funding:	\$371,000
Funds obligated FY 98:	\$371,000
Funds expended FY 98:	\$42,417
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$7,925

Funding provided to: U.S. Forest Service

Project Description: Program to reduce generation of fine sediment from upland, riparian, and road-related sources in three watersheds utilized by spring run salmon and steelhead in Lassen National Forest (LNF). Stabilization measures would be implemented in known problem areas, and inventory, design, and planning measures pursued for remaining road-related problems. Includes identification of willing sellers for potential land exchange related to acquisition of riparian areas.

Expected Project Completion Date:

December 31, 2000

First Quarter Accomplishments:

No report provided for first quarter.

3) Project Title: Butte Creek Watershed Restoration Implementation

CALFED Recommended level of funding:	\$294,000
Funds obligated FY 98:	\$294,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$10,474

Funding provided to: U.S. Fish and Wildlife Service

Project Description: Watershed planning, outreach, and restoration project to be implemented by the Butte Creek Watershed Conservancy. This project will include watershed planning, an education program, an evaluation of the geomorphology of an important segment of Butte Creek, and a road survey in the watershed to identify future erosion control needs. The U.S. Fish and Wildlife Service is working with California State University, Chico and the Butte Creek Watershed Conservancy to develop this program.

Expected Project Completion Date: September 30, 1999

First Quarter Accomplishments:

No report provided.

4) Project Title: Inventory of Forest Road Systems at Cat Creek Watershed

CALFED Recommended level of funding:	\$38,000
Funds obligated FY 98:	\$38,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Forest Service

Project Description: An interdisciplinary team will develop a process for reviewing the forest road system within the Cat Creek watershed. The objective is to provide decision makers with recommendations about which roads to repair, relocate, gate, or obliterate. The process developed by this team would be used to review the entire forest road system within the Cosumnes River Basin. Roads are the principle cause of accelerated erosion in forests in the western United States; this project will ultimately improve riparian resources and aquatic habitat by removing sources of sedimentation.

Expected Project Completion Date: September 30, 1999

First Quarter Accomplishments:

No report provided.

Monitoring, Permit Coordination, and Other Special Support Programs:

CALFED Recommended level of funding:	\$3,570,000
Funds obligated FY 98:	\$3,042,868
Funds expended FY 98:	\$611,835
Funds obligated FY 99:	(171,965)
Funds expended FY 99:	\$622,967

1) **Project Title:** Integrated Phasing Strategy

CALFED Recommended level of funding:	- ,	\$1,647,000
Funds obligated FY 98:		\$1,720,595
Funds expended FY 98:		\$565,635
Funds obligated FY 99:		(\$172,351)
Funds expended FY 99:		\$389,985

Funding provided to: U.S. Bureau of Reclamation

Project Description: In order to restore the Bay-Delta ecosystem using adaptive management, a logical set of priorities must be established based on the current understanding of the system. Actions need to be selected to address these priorities and the results of these actions need to be evaluated to refine priorities in future years. The Ecosystem Restoration Program Plan (ERPP) is the "common element" to all alternatives being considered in the Programmatic EIS. A strategy for phased implementation of the ERPP needs to be developed to lay out these priorities and identify the near-term

restoration actions to address them. The strategy for phased implementation of ecosystem restoration activities is described in the ERPP, essential to the conservation strategy being developed to comply with the Endangered Species Act, and the basis for setting funding priorities for near-term restoration in the guidance document. The phased implementation strategy will require technical input on three levels including:

- a) additional technical assistance at the staff level;
- b) establishment of a standing science panel composed of independent scientists and local stakeholder, agency, and independent specialists; and
- c) a panel of scientists (without local stakeholder, agency, or other independent specialists).

First Quarter Accomplishments:

CALFED program staff has completed the Strategic Plan for the Ecosystem Restoration Program. The interagency conservation strategy team is continuing to develop an ecosystem/habitat based biological assessment for the Federal Endangered Species Act Section 7 requirements and a programmatic Natural Community Conservation Program plan for California's NCCP Act, Section 2835 requirements.

2) **Program Title:** Comprehensive and Coordinated Monitoring Assessments and Research Program (CCMARP)

CALFED Recommended level of funding:	\$1,157,000
Funds obligated FY 98:	\$1,110,700
Funds expended FY 98:	\$46,200
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$169,560

Funding provided to: U.S. Bureau of Reclamation

Project Description: The Interagency Ecological Program (IEP) and the San Francisco Estuary Institute will work with the CALFED program staff and stakeholders to develop CCMARP for the Bay-Delta and its watershed. CCMARP will include a structure and process for integrated data management, data analysis, and reporting. Monitoring elements for near-term ecosystem restoration need to be integrated with CCMARP so that restoration proposals contain monitoring elements to determine whether stated objectives have been met and to provide guidance for assessing future restoration needs. This special support program will fund a portion of a system which does the following: reviews monitoring, assessment, and reporting plans prior to implementation; standardizes data collection methodology, format, and storage; and reviews, evaluates, and circulates results to all interested parties. In our January 16, 1998, request, funding was approved to develop the basic framework which is now in draft form. This funding will be used to begin implementation of CCMARP once the framework is complete. CCMARP will incorporate data from the Interagency Ecological Program (IEP), the Central Valley Project, the Comprehensive Assessment Monitoring Program, and data

provided by the San Francisco Estuary Institute. CCMARP will include a structure and process for integrated data management, data analysis, and reporting. Monitoring elements for near-term ecosystem restoration need to be integrated with CCMARP so that restoration proposals contain monitoring elements to determine whether stated objectives have been met and to provide guidance for assessing future restoration needs. Funding recipients include the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, and CALFED program staff.

First Quarter Accomplishments:

A conceptual mode workshop was convened to explore the basis for developing and subsequently utilizing conceptual models for resource management. A preliminary draft report entitled "Recommendations for the Implementation and Continued Refinement of a Comprehensive Monitoring, Assessment and Research Program" has been completed and distributed. Based on comments received a final draft is in preparation and will be available for public distribution by the middle of January 1999. After a public review period, a final report will be developed and distributed to the CALFED Policy Group for their acceptance.

3) Program Title: Bay-Delta Education Program

CALFED Recommended level of funding:	\$300,000
Funds obligated FY 98:	\$0
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$386
Funds expended FY 99:	\$386

Funding provided to: U.S. Bureau of Reclamation

Project Description: Building public understanding of efforts to restore the Bay-Delta ecosystem is critical to the success of these efforts. Many of the concepts in habitat restoration are new and innovative and there is the need to increase public understanding to increase acceptance and facilitate implementation. This program will provide support for educational programs such as Adopt-a-Watershed. The U.S. Bureau of Reclamation will most likely work with the National Fish and Wildlife Foundation to develop the most effective program.

First Quarter Accomplishments:

No report provided.

4) Project Title: Coordinated Permitting

CALFED Recommended level of funding:	\$282,000
Funds obligated FY 98:	\$100,000
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$75,505
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: Facilitation of timely review and necessary action on permits will be required for implementation of near-term ecosystem restoration projects. This effort will also lay the groundwork for a coordinated approach on permit coordination for the eventual implementation of the CALFED Bay-Delta Program (CALFED Program).

First Quarter Accomplishments:

Provided assistance to recipients regarding permit and environmental documentation requirements and lead agency designation. Preparation is continuing on a Draft biological assessment to assist in the initiation of a programmatic consultation for early ecosystem restoration activities obtaining Corps of Engineers 404/401 permits. Completion of the Draft biological assessment is scheduled for February 1999.

5) Program Title: Development of a Watershed Management Program

CALFED Recommended level of funding:	\$184,000
Funds obligated FY 98:	\$111,574
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$76,194
Funds expended FY 99:	\$63,036

Funding provided to: U.S. Bureau of Reclamation

Project Description: Successful and durable solutions to complex water quality problems which affect environmental resources are best approached from the perspective of an entire watershed. Through this approach, local pollution prevention and control activities are coordinated with similar activities to enable a concerted effort to alleviate ecosystem and water quality problems. Coordination of these efforts also results in the exchange of information, sharing of experiences, and development of more efficient solutions.

First Quarter Accomplishments:

The Watershed Program, working with Bay-Delta Advisory Council's (BDAC) Watershed Work Group (WGG) and the Interagency Watershed Advisory Team (IWAT) has completed a revised version of the Watershed Program Plan. The program plan contains refined program goals and objectives, lays out a set of driving program principles, describes five primary program elements, and identifies 11 key implementation actions. The five primary program elements and the 11 key

implementation actions are as follows:

Five Primary Program Elements

- Facilitate and improve coordination and assistance among government agencies, other organizations, and local watershed groups
- Adaptive management and monitoring
- Education and community outreach
- Integration with other CALFED programs
- Defining

Eleven Program Actions

- Fund and implement watershed restoration maintenance, conservation and monitoring activities
- Identify priority locations and implement watershed restoration efforts
- Assist local watershed groups and government agencies to address common issues, to ensure effective communication and implementation among government agencies and stakeholders
- Develop and implement a funding process to build community capacity and insure participation of local landowners
- Improve the use and usefulness of existing and future watershed clearinghouse functions
- Ensure the completion of project level environmental documentation and permitting
- Evaluate the benefits that accrue from watershed management activities designed to achieve CALFED goals and objectives
- Establish, fund and maintain watershed restoration, and maintenance assistance to aid local watershed groups and private landowners with project concept, design, and implementation
- Coordinate with other CALFED and Non-CALFED programs on watershed related activities.
- Work with stakeholders to develop state-wide umbrella watershed legislation
- With the consent of owners perform reoperation analysis for small hydro facilities to benefit local and downstream water users, water quality and the environment

The revised draft also outlines an implementation strategy. This work was accomplished in part by hosting four IWAT meetings and by providing staff support to three watershed workgroup meetings. The Program also worked closely with Comprehensive Monitoring, Assessment, and Research Program's (CMARP) watershed team to develop the draft monitoring plan for the watershed program.

Miscellaneous Expenses/Administration:

CALFED Recommended level of funding:	\$4,468,990
Funds obligated FY 98:	\$172,360
Funds expended FY 98:	\$172,925
Funds obligated FY 99:	\$49,893
Funds expended FY 99:	\$49,893

1) Program Title: Restoration Reserve

CALFED Recommended level of funding:	\$3,318,990
Funds obligated FY 98:	\$0
Funds expended FY98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: The Cost Share Agreement between the State of California and the United States related to Ecosystem Restoration Under Proposition 204 and the Bay-Delta Act, calls for setting aside up to 5 percent of the available funds in a Restoration Reserve Fund for emergency and single-time expenditures. The Policy Team recommends that \$3.3 million of the FY 1998 Federal Bay-Delta Accounts be set aside for that purpose. Funds will be allocated to the U.S. Bureau of Reclamation and disbursed as determined by the Policy Team.

First Quarter Accomplishments:

No report provided.

2) Program Title: Technical Review and Quality Control Program

CALFED Recommended level of funding:	\$850,000
Funds obligated FY 98:	\$0
Funds expended FY 98:	\$0
Funds obligated FY 99:	\$0
Funds expended FY 99:	\$0

Funding provided to: U.S. Bureau of Reclamation

Project Description: While each federal agency is required to monitor the schedule and budget of the activities they undertake with this appropriation, there is a need to have an efficient quality control program to monitor work products to ensure that deliverables are satisfactory. This program will provide the resources needed to technically review work products as needed for the projects.

First Quarter Accomplishments:

No report provided.

3) Program Title: Administrative Support Program

CALFED Recommended level of funding:	\$300,000
Funds obligated FY98:	\$172,925
Funds expended FY 98:	\$172,360
Funds obligated FY 99:	\$49,893
Funds expended FY 99:	\$49,893

Funding provided to: U.S. Bureau of Reclamation

Project Description: Funding is requested for support provided by the U.S. Bureau of Reclamation in coordinating funding activities with other Federal CALFED agencies from the Bay-Delta Ecosystem Restoration Appropriation.

First Quarter Accomplishments:

No report provided.

TOTAL FOR ALL CATEGORIES:

CALFED FY 98/99 level of funding:	\$160,000,000
Funds obligated FY 98:	\$73,056,773
Funds expended FY 98:	\$5,005,125
Funds obligated FY 99:	(\$3,535)
Funds expended FY 99:	\$1,419,346

PROJECT SUMMARY FOR CALIFORNIA BAY-DELTA ECOSYSTEM RESTORATION APPROPRIATION

(First Quarter of FY 1999)

Refer to the attached Individual Project Progress Reports for project specifics

Category/ Agency/Proposal	Total Estimated Cost of Proposal	Total Funds Obligated Through Dec 31, 1998	Total Funds Expended through Dec 31, 1998
Fish Screen Improvements	\$2,539,000	<u>\$1,639,000</u>	<u>\$14,381</u>
1) U.S. Bureau of Reclamation: Woodbridge Fish Screen and Passage	1,575,000	1,575,000	14,381
2) Natural Resource Conservation Service:	900,000	0	0
Small Diversion Fish Screens Program			
3) U.S. Bureau of Reclamation:	49,000	49,000	0
Richter Brothers Screen	15 000	15 000	
4) U.S. Bureau of Reclamation: Boeger Family Farm Screen)	15,000	15,000	0
Fish Passage Improvements	\$8,325,000	\$2,437,234	\$349,234
1) Bureau of Reclamation:	8,000,000	2,112,234	24,234
Fish Passage Program			
2) U.S. Bureau of Reclamation:	325,000	325,000	325,000
Anderson Cottonwood Irrigation District Fish Passage U.S.		ı	

Category/ Agency/Proposal	Total Estimated Cost of Proposal	Total Funds Obligated Through Dec 31, 1998	Total Funds Expended through Dec 31, 1998
Habitat Restoration in Floodplains and Marshes 1) U.S. Fish and Wildlife Service: Floodplain Restoration/Habitat Restoration on Existing Conservation Lands Program	\$32,842,000 14,000,000	\$32,526,977 14,000,000	\$3,608,625 5,989
2) U.S. Fish and Wildlife Service: San Joaquin Floodplain Acquisition and Riparian Restoration	10,647,000	10,647,000	63,923
3) U.S. Bureau of Reclamation (for The Nature Conservancy): Cosumnes River Floodplain Acquisition	3,500,000	3,500,000	3,500,000
U.S. Army Corps of Engineers Prospect Island Habitat Protection Project	2,000,000	2,000,000	22,356
5) U.S. Army Corps of Engineers: Habitat Restoration/Flood Control Bypasses Program	1,200,000	1,200,000	0
6) U.S. Bureau of Reclamation: Napa River Wetlands Acquisition	1,000,000	1,000,000	0
7) U.S. Fish and Wildlife Service: Bear Creek Floodplain Restoration Demonstration Project	334,000	18,977	16,357
8) U.S. Bureau of Reclamation:	85,000	85,000	0
Cache Slough Habitat Enhancement 9) U.S. Environmental Protection Agency: Regional Wetlands Goals Project	76,000	76,000	0
River Channel Changes 1) U.S. Fish and Wildlife Service: Liberty Island Acquisition	\$9,624,010 8,577,000	\$9,624,010 8,577,000	\$242,800 0
U.S. Geological Survey: Sedimentation Movement, and Availability and Monitoring in the Delta	1,047,010	1,047,010	242,800
Improved Instream Flows 1) U.S. Bureau of Reclamation:	\$14,500,000 14,450,000	\$14,450,000 14,450,000	<u>\$0</u>
Environmental Water Acquisition Program 2) U.S. Bureau of Reclamation: Environmental Water Acquisition Study	50,000	0	0

Agency/Proposal	Total Estimated Cost of Proposal	Total Funds Obligated Through Dec 31, 1998	Total Funds Expended through Dec 31, 1998
Water Quality and Temperature Improvement 1) U.S. Geological Survey: Evaluation of Selenium Sources, Levels, and Consequences in the Delta	\$5,003,000 1,589,000	\$5,003,000 1,589,000	\$691,560 225,420
U.S. Geological Survey: Assessment of Organic Matter in the Habitat and Its Relationship to the Food Chain	1,400,000	1,400,000	381,573
3) U.S. Bureau of Reclamation: Bacterial Treatment of Selenium in the Panoche Drainage	1,149,000	1,149,000	66,973
4) U.S. Bureau of Reclamation: Sand and Salt Creek Watershed Project	599,000	599,000	17,594
5) U.S. Bureau of Reclamation: Integrated Pest Management in Suisun Bay Program	266,000	266,000	0
Introduced and Undesirable Species Control 1) U.S. Fish and Wildlife Service: Exotic Species Control Program	\$1,250,000 1,250,000	\$1,250,000 1,250,000	<u>\$0</u>
Improved Fish Management and Hatchery Operations 1) U.S. Bureau of Reclamation: Evaluation of Tagging Data	\$625,000 625,000	\$625,000 625,000	<u>\$0</u>
Watershed Management 1) U.S. Environmental Protection Agency: Watershed Restoration Planning 2) U.S. Forest Service:	\$2,253,000 1,550,000	\$2,253,000 1,550,000	<u>\$60,816</u> 0
Watershed Improvement/Sediment Stabilization on Deer, Mill and Antelope Creeks (Lassen National Forest)	371,000 [°]	371,000	50,342
3) U.S. Fish and Wildlife Service: Butte Creek Watershed Road Survey	294,000	294,000	10,474
4) U.S. Forest Service: Inventory of Forest Road Systems, Cat Creek Watershed	38,000	38,000	0

APPENDIX A

Agency/Proposal	Total Estimated Cost of Proposal	Total Funds Obligated Through Dec 31, 1998	Total Funds Expended through Dec 31, 1998
Monitoring, Permit Coordination, and Other Special	<u>\$3,570,000</u>	<u>\$3,022,603</u>	<u>\$1,234,802</u>
Support Programs 1) U.S. Bureau of Reclamation:	1,647,000	1,548,244	955,620
Integrated Phasing Strategy 2) U.S. Bureau of Reclamation: Comprehensive and Coordinated Monitoring and Research Program (CCMARP)	1,157,000	1,110,700	215,760
3) U.S. Bureau of Reclamation: Bay-Delta Education Program	300,000	386	386
U.S. Bureau of Reclamation: Coordinated Permitting	282,000	175,505	0
5) U.S. Bureau of Reclamation: Development of a Watershed Management Program	184,000	187,768	63,036
Miscellaneous Expenses/Administration 1) U.S. Bureau of Reclamation: Restoration Reserve Fund	\$4,468,990 3,318,990	<u>\$222,415</u> 0	<u>\$222,253</u> 0
2) U.S. Bureau of Reclamation:	850,000	0	0
Technical Review and Quality Control Program 3) U.S. Bureau of Reclamation: Administrative Support Program	300,000	222,415	222,253
TOTAL ALLOCATION FOR FEDERAL BAY-DELTA FUND	\$85,000,000	\$73,053,239	\$6,424,471

34

BAY-DELTA ECOSYSTEM RESTORATION APPROPRIATION PROGRAM/PROJECT MAP INDEX

- A. Fish Screen Improvements
 - Woodbridge Fish Screen and Passage Richter Brothers Screen

 - Boeger Family Farm Screen A3
 - Small Diversion Fish Screens Program (Bay-Delta System-wide Program) A4
- B. Fish Passage Improvements
 - Anderson-Cottonwood Irrigation District Fish Passage
 - Fish Passage Program (Bay-Delta System-wide Program)
 Battle Creek Screens and Fish Passage B2

 - **B4**
 - Stanislaus River Channel Restoration at the Williams Site Tuolumne River Channel Restoration (Special Run Pool 9) **B5**
- C. Habitat Restoration in Floodplains and Marshes
 - San Joaquin Floodplain Acquisition and Riparian Restoration
 Bear Creek Floodplain Restoration Demonstration Project
 South Napa River Wetlands Acquisition and Restoration Program
 Cache Slough Habitat Enhancement
 San Francisco Bay Area Wetlands Ecosystem Goals Project

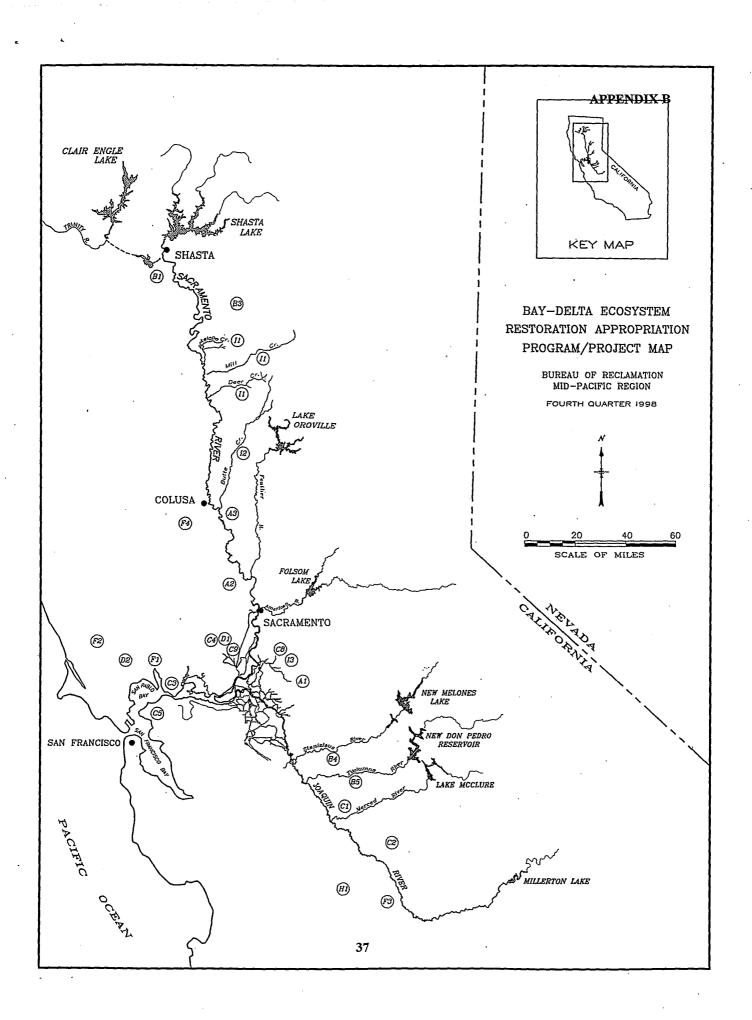
 - Habitat Restoration/Flood Control Bypasses Program (Bay-Delta System-wide
 - Floodplain Restoration/Habitat Restoration on Existing Conservation Lands
 - Program (Bay-Delta System-wide Program)
 Cosumnes Floodplain Acquisition and Restoration
- D. River Channel Changes
 - D₁
 - Liberty Island Acquisition
 Sedimentation Movement and Availability, and Monitoring in the Delta D2
- E. Improved Instream Flows
 - Water Acquisition Program (Bay-Delta System-wide Program)

APPENDIX B

F.	Water Qu	iality and	Temperature	Improv	ement

- F1 Assessment of Organic Matter in the Habitat and Its Relationship to the Food Chain
 F2 Evaluation of Selenium Sources, Levels, and Consequences in the Delta
 F3 Bacterial Treatment of Selenium in the Panoche Drainage
 F4 Sand and Salt Creek Watershed Project
 G. Introduced and Undesirable Species Control
- - G1 Exotic species Control Program (Bay-Delta System-wide Program) Improved Fish Management and Hatchery Operations
- **Evaluation of Tagging Data** H1
- Watershed Management
- Watershed Management

 Il Watershed Improvement/Sediment Stabilization on Deer, Mill and Antelope Creeks
 Il Butte Creek Watershed Road Survey
 Il Inventory of Forest Road Systems, Cat Creek Watershed
 Il Watershed Planning Program (Bay-Delta System-wide Program)
 Monitoring, Permit Coordination, and Other Special Support Programs
 Integrated Phasing Strategy (Bay-Delta System-wide Program)
 Il Coordinated Permitting (Bay-Delta System-wide Program)
 Il Development of a Watershed Management Program
 Il Comprehensive and Coordinated Monitoring and Research Program (Bay-Delta System-wide Program)
 Il Bay-Delta Education Program (Bay-Delta System-wide Program)
 - J5 Bay-Delta Education Program (Bay-Delta System-wide Program)



FISCAL YEAR 1998 CALFED ECOSYSTEM INVESTMENT PROJECT MAP LEGEND

- Sacramento River and Tributary Fish Screens
- Reclamation District 108 Fish Screen
- 3 Princeton Fish Screen Wilson Ranch Screen
- Assessment and Implementation of Urban Use Reduction of Diazinon and Chlorpyrifos (Sacramento County)
 Watershed Management Planning Upper Sacramento River
 Sacramento River Floodplain Acquisition National Process Restoration
- Sacramento River Floodplain Acquisition Active Riparian Forest Restoration Sacramento River Meander Restoration Project
- Watershed Improvements/Sediment Stabilization (Deer, Mill, and Antelope Creeks)
- Watershed Restoration Planning (Auburn Ravine and Coon Creek)
 Battle Creek Screens and Fish Passage
 Watershed Plan (Big Chico Creek)
- 12
- 13
- Gorrill Dam Screen and Ladder
- Adams Dam Screen and Passage
- 16 17 Butte Creek Acquisition and Riparian Restoration Saeltzer Dam Fish Passage
- 18 Cottonwood Creek Channel Restoration
- 19 Watershed Plan Implementation (Deer Creek)
- Mill Creek Riparian Restoration Phase II Hastings Tract Fish Screen Feasibility Study Monitoring of Delta Contaminants
- Effects of Wetlands Restoration on Methyl Mercury Levels
- 20 21 22 23 24 25 26 27 28 29 30 31 32 33 Sedimentation Movement and Availability and Monitoring in Delta
- Contaminant Effects on Smelt
- Jepson Prairie Restoration

- In Channel Island Demonstration Project
 Liberty Island Acquisition
 Franks Tract Wetlands Habitat Restoration
 Tyler Island Levee Protection and Habitat Restoration Pilot Project
- Cosumnes Floodplain Acquisition and Restoration
 Mokelumne River Setback Levee and Habitat Restoration
 Bay Point Shoreline Restoration Plan
 Martinez Regional Shoreline Restoration

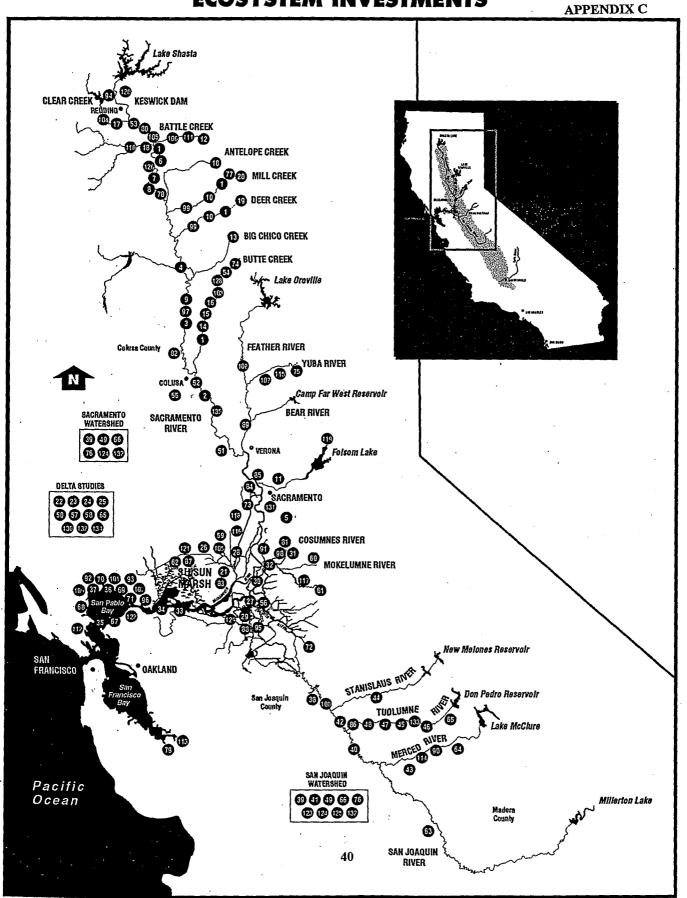
- Preventing Exotic Introductions from Ballast Water Cullinan Ranch Restoration
- Tolay Creek Restoration
- 38
- Banta-Carbona Fish Screen
 Biologically Integrated Orchard System (BIOS) Pesticide and Fertilizer Reduction/Sacramento and 39
- San Joaquin Watersheds
 San Joaquin River Real-Time Water Quality Management Program 40
- Developing a Genetic Baseline for San Joaquin Salmon Acquisition and Restoration of Refuge Lands (San Joaquin River National Wildlife Refuge)
- Bear Creek Floodplain Restoration Demonstration Project (San Luis National Wildlife Refuge)
 Stanislaus River Channel Restoration (Williams Site)
 Knights Ferry Gravel Replenishments
 Gravel Replacement (Basso Bridge)
- 44

- 47

- Tuolumne River Channel Restoration (Special Run Pool 9)
 Tuolumne River Setback Levees and Channel Restoration (Mining Reach)
 Evaluation of Alternative Pesticide Use Reduction Practices
 Assessment of Organic Matter in the Habitat and Its Relationship to the Food Chain
- Richter Brother Screen
- Boeger Family Farm Screen
- Anderson-Cottonwood Irrigation District (ACID) Fish Passage
- Butte Creek Watershed
- Sand and Salt Creek Watershed Project
- Twitchell Island Restoration
- Evaluation of Selenium Sources, Levels, and Consequences in the Delta
- Culture of Delta Smelt
- Cache Slough Habitat Enhancement

- Inventory of Forest road Systems at Cat Creek Watershed Woodbridge Fish Screen Passage Selected Fish Screens Suisun Marsh Bacterial Treatment of Selenium in the Panoche Drainage Merced River Ranch Acquisition and Restoration Basso Bridge Land Acquisition Evaluation of Tagging Data San Francisco Bay Area Wetlands Ecosystem Goals Project Hamilton Wetlands Restoration Project Napa River Watershed Stewardship Sonoma Creek Watershed Restoration Project South Napa River Wetlands Acquisition and Restoration Program 61 62 63 64 65 66 67 68 69 70 71

CALFED FY 1998 STATE, FEDERAL & STAKEHOLDER ECOSYSTEM INVESTMENTS



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PROJECTS APPROVED AS OF DECEMBER 31, 1998 (CALFED FUNDING SOURCES) (In Thousands of Dollars)

Cateory 1	Fish-Screen Improvements			(11111)	asanas or Do	nais _į							
Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
97-C04A	Select Fish Screens on the Sacramento River and Tributaries	State	Department of Fish and Game	446			375				71	•	
97-C01	RD 108 Fish Screen at Wilkins Slough Pumping Plant		R. D. 108	9,704			2,500	2,950	3,825				429
	Princeton Fish Screen	Local	R. D. 1004	5,625			1,750	3,825					429 50
		Priv.	Deseret Farms of California	200						200			
97-M03	Gorrill Dam Screen and Ladder	Priv.	Gorrill Land Company	1,456				304	656	370	76		50
97-M04	Adams Dam Screen and Passage	N-P	Ducks Unlimited	506				171		217			118
97-M06	Hastings Tract Fish Screen Feasibility Study	Priv.	Hastings Island Land Company	27						27			
			Banta-Carbona Irrigation District	2,976						939	75	1,917	45
98-B01		Priv.	Henry D. Richter, Jr.	49									
98-B02	Boeger Family Farm Screen	Priv.	Boeger Family Farm	15	15								
98-B11	Woodbridge Fish Screen and Passage	Local	Woodbridge Irrigation District	1,576	1576								
98-C04B	Marsh	State	Department of Water Resources	2,810			2,785						25
	Fish Screen	Local	Glenn-Colusa Irrigation District	5,000				5,000					
	Contra Costa Fish Screen (Rock Slough)			1,000				1,000					
	Anadromous Fish Screen Program	Various	Various	3,250				3,250					

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Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
98-R01	Small Diversion Fish Screens Program	1260	Natural Resources Conservation Service	900	900								
98-C16	Entrainment of Fish	1	Department of Fish and Game	200			200						
98-N04	Pelger Mutual Water Company: Small Fish Screen Evaluation	Priv.	Pelger Mutual Water Company	95			95						
Total for Fish Screen Improvements: 35,835 2540 0 7,705 16,500 4,481 1,753							222	1,917	717				

Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
Category	2. Fish-Passage Improvements												
97M05	Saeltzer Dam Fish Passage	Priv	Townsend Flat Water Ditch Company	388			-			238		150	
98-B03	Anderson-Cottonwood Irrigation District (ACID) Fish Passage	Local	Anderson-Cottonwood Irrigation District	375	325								50
	I Toll Coods of Trogram	Fed	U.S. Bureau of Reclamation	3,253	3253								
98-B16 97-M02	Battle Creek Screens and Fish Passage	State	Department of Water Resources	790	395					395			
97M-08 98-F06	Tuolumne River Channel Restoration (Special Run Pool 9)	Local	Turlock Irrigation District	3,054	655					2,353			46
98-B21	Anadromous Fish Passage at Clough Dam on Mill Creek	State	Department of Water Resources	1,280	1280								
98-B22	Fish Passage Improvement Project at the Red Bluff Diversion Dam	Local	Tehama-Colusa Canal Authority	341	341								
98-B23	Steelhead and Chinook Salmon Fish Passage Barrier Remediation on the Guadulupe River		Natural Heritage Institute et. al.	178	178					-			-
98-B24	ACID Fish Passage and Fish Screen Improvement Project, Phase II		Anderson-Cottonwood Irrigation District	860	860								
98-B25	Cosumnes River Salmonid Barrier Program Fishery		Foundation of California	188	188								
98-B26	Construction	Priv	Boeger Family Farms	140	140								
98-B27	Hastings Tract Fish Screen Phase II: Construction	Priv	Hastings Island Land Company	271	271								
98-B28	City of Sacramento Fish Screen Replacement Project Phase II	Local	City of Sacramento	1,400	655								745
98-B29	American Basin Fish Screen and Habitat Improvement Project	Priv	Natomas Mutual Water Company	200	200				· · · · · · · · · · · · · · · · · · ·				

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Project

No.

98-C11

98-N01

98-N02

Type

Local

R.D. 2035

Applicant

Department of Fish and Game

Institute for Fisheries Resources

Project Title

lower San Joaquin River and

Reclamation District 2035

Expanding California Salmon Habitat Through Non-

Adult Fall-Run Chinook Salmon Movement in the

south Delta

Fish Screen

governmental and

Nonregulatory Mechanisms...

Total for Fish Passage Improvements:

Bay-Delta

Ecosys

Resto

Account

(FY98)

8741

Total

Funding Pro

posed

285

100

49 13,152 Bay-Delta

Ecosys

Resto

Account

(FY99)

Calif Urban

Water

Assoc.

2,986

Other State

Funding

Prop 204 (CVPIA)

CVPIA

Prop 204

(Cat. III)

285

100

434

Other

Federal

Funding

150

Other

841

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Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
Category :	3. Habitat Restoration in Flood	plains :	and Marshes										
97-N14	Cosumnes Floodplain Restoration	N-P	The Nature Conservancy	1,975			1,975						-
	Cosumnes Floodplain Acquisition	N-P	The Nature Conservancy	5,323	3500		·			-			1,823 662
		N-P	Ducks Unlimited	1,031			369						
		N-P	Ducks Unlimted	705			283						422
97B04	San Joaquin River Floodplain Acquisition and Riparian Restoration (SJR NWR)	Fed	U.S. Fish and Wildlife Service	20,000	10647		-				-	9,353	
97-B05	Bear Creek Floodplain Restoration Demonstration Projects (NL NWR)	Fed	U.S. Fish and Wildlife Service	414	334							80	
97-M09	Tuolumne River Setback Levees and Channel Restoration (Mining Ranch)	Local	Turlock Irrigation District	6,353					656	2,801			2,896
98-B08	Cache Slough Habitat Enhancement	Local	R.D. 2060	85	. 85								
98-C04	Merced River Ranch Acquisition and Restoration	State	Department of Fish and Game	704			658						46
98-E03	San Francisco Bay Area Wetlands Ecosystem Goals Project (AKA: Regional Wetlands Goals Project)	Fed	U.S. Environmental Agency	276	76								200
98-C03	Hamilton Wetland Restoration	N-P	San Francisco Bay Conservation & Development and The California Conservancy	2,324			1,000						1,324
98-B13	South Napa River Wetlands Acquisition and Restoration	Local	Napa County Land Trust	1,000	1000				·				
98-A02	Habitat Restoration/Flood Control Bypasses Program	Fed	U.S. Army Corps of Engineers	1,200	1200						-		,
98-A01	Prospect Island Levee . Repairs	Fed	U.S. Army Corps of Engineers	2,000	2000		•						,
97-N06 98-F03	Butte Creek Acquisition and Riparian Restoration	N-P	California State University, Chico	869	125		187				425		132
97-N08 98-F04	Lower Mill Creek Riparian Restoration	N-P	Mill Creek Conservancy and The Nature Conservancy	238	30		69						139

Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
98-F07	Grayson River Ranch Perpetual Easement and Restoration	Local N-P	East Stanislaus RCD and Friends of the Tuolumne	732	732								
98-F08	Hill Slough West Habitat Demonstration Project	State	Department of Fish and Game, Bay-Delta and Special Water Project Division	200	200								
98-F09	Restoration	State	Department of Fish and Game	. 25	25								
98-F10	Project	State	Department of Fish and Game	256	256		-					-	
98-F11	Enhancement	State	Department of Fish and Game	. 2,433	2433								
	Stone Lakes NWR Land Acquisitions	Fed Local	US Fish and Wildlife Service, Sacramento Realty Office	1,900	1900								
	Petaluma Marsh Expansion Project - Marin County	N-P	Marin Audubon Society	352	352								
98-F14	South Napa River Wetlands Acquisition and Restoration Program		Napa County Land Trust	431	431								
98-F15	Lower Clear Creek Floodway Restoration Project		Western Shasta Resource Conservation District	3,559	3559								
98-F16	Fern-Headreach Tidal Perennial Aquatic and Shaded River Aquatic Conservation Project	Prîv	Thomas Luckey (L & L Farms, LLC)	425	425								
98-F17	Benicia Waterfront Marsh Restoration	Local	City Of Benicia	59	59						. 1		
98-F18	Floodplain Acquisition, Management, and Monitoring on the Sacramento River	N-P	The Nature Conservancy, Wildlife Conservation Board, and others.	1,000	1000								
98-F19	Cosumnes River Acquisition, Restoration Planning and Demonstration	N-P	The Nature Conservancy	750	750								

APPEND	
IX C	

Project No.	Project Title	Type	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
	Deer and Mill Creeks Acquisition and Enhancement	N-P	The Nature Conservancy	1,000	1000								
98-F21	Lower San Joaquin River Floodplain Protection and Restoration Project	irea	US Fish and Wildlife Service, San Luis National Wildlife Refuge	1,100	723	377		,		·			
98-F22	Biological Restoration and Monitoring in the Suisun Marsh/North San Francisco Bay Ecological Zone	istale	California State University Hayward	773		773							
98-F23	South Napa River Tidal Slough and Floodplain Restoration Project	Local	City of American Canyon	1,455		1,455							
	Butte Creek Riparian Restoration Demonstration		Don Holtgrieve, Department of Geography and Planning, CSU Chico	76	,			·					
Total for Habitat Restoration in Floodplains and Marshes: 61					32842	2,681	4,541	<u> 0</u>	656	2,801	425	9,433	7,644

Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CÝPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
				-									
Category	4. River Channel Changes			r							•		
97-C03	Watershed Management Planning - Upper Sacramento River (SB 1086)	State	Department of Water Resources	. 200			200						
97 - N02	(SB1086)	Fed, N-P	U.S. Fish and Wildlife Service Wildlife Conservation Board and The Nature Conservancy	15137	-		9,880		182				5,07
97-N03B	1.000)	Fed, N-	U.S. Fish and Wildlife Service Wildlife Conservation Board and The Nature Conservancy	4418			1,293						3,125
	Sacramento River Meander Belt Restoration Project (SB 1086)	N-P	The Nature Conservancy	899	-		899			·			
97-N07		Priv	Graham Matthews and Associates	71	i		61						11
97-B02		Fed	U.S. Geological Survey	1047	1,047								·
	0.000.0	N-P	Solano County Farmlands and the Open Space Foundation	245			245						
97-N <u>1</u> 1	1	Local	Association of Bay Area Governments	450	,		270						180
97-B03	Liberty Island Acquisition	Fed	U.S. Fish and Wildlife Service	8577	8,577								
97-N12		State,	Department of Water Resources, Moffatt and Nichols Engineers, and DPR	252			232						20
	Tyler Island Levee Protection and Habitat Restoration Pilot Project	Priv	Habitat Assessment and Restoration Team, Inc.	885			885						
97.N16	Bay Point Shoreline Restoration Plan	Locai	East Bay Regional Park District	239		•	185						54

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Project

No.

97-N21

97-C11

98-C01

98-C05

98-C09a

98-C09c

Bay-Delta

Ecosys

Resto

Account

(FY98)

9,624

Total

Funding Pro

posed

626

273

173

24

276

200

37,600

3608

Type

Priv

State

State

CALFED

CALFE D, State

State CALF D, State Game

Applicant

Carl Mesick Consultants

State - Department of Fish and

Department of Water Resources

Department of Fish and Game

CALFED Bay-Delta - Delta

CALFED Bay-Delta DFG

CALFED Bay-Delta RWQC

Protection Comm.

Project Title

Gravel Replacement (Basso

Twitchell Island Restoration State

Knights Ferry Gravel

Basso Bridge Land

Sediment Management

Sediment Management

Replenishment

Bridge)

Acquisition

98-C09b Sediment Management

Total of River Channel Changes:

Bay-Delta

Ecosys

Resto

Account

(FY99)

Prop 204

(Cat. III)

536

251

173

24

276

200 19,193

0

3,583

Prop 204

(CVPIA)

CVPIA

182

0

Calif Urban

Water

Assoc.

Other State

Funding

25

47

0

0

8,554

Other

Federal

Funding

Other

90

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Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
Category	5. Improved instream Flows	s											
Not	Environmental Water Acquisition Program (AKA: Water Acquisition Program)		U.S. Bureau of Reclamation	14,500	14,500								
Total for	Improved Instream Flows:			14,500	14,500	0	0	0	0	0	0	0	(

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Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
Q_4	6. Water Quality and Temperat						•						5.1
Category	Assessment and	ure imp	rovements		·			}					
97-N01	Implementation of Urban Use Reduction of Diazinon and Chlorpyrifors		Sacramento Area Stormwater Permittees							•			•
	(00000000000000000000000000000000000000	Local		857			664			ļ			193
97-N09	Monitoring of Delta Contaminants	N-P	San Francisco Baykeeper	201	•		100				50		51
97C05	111310417 = 2114	N-P	University of California, Davis	599			546				53		
97-C06		N-P	University of California, Davis	437			437					,	
97-N20	Biologically Integrated Orchard Systems (BIOS) Pesticide and Fertilizer Reduction	Priv	Community Alliance with Family Farmers	1681			1,681					·	
97-C08	San Joaquin River Real- Time Water Quality Management Program	State	Department of Water Resources	932			932	·					
97-C12	Evaluation of Alternative Pesticide Use Reduction Practices for Diazinon and Chlorpyrifos	N-P	University of California, Davis	958			958						
97-B06	Assessment of Organic Matter in the Habitat and its Relationship to the Food Chain	Fed	U.S. Geological Survey	1400	1,400					-			
98-B05	Sand and Salt Creek Watershed Project	Local	Colusa County Resources Conservation District	2107	599							····	1,508
98-B07	Evaluation of Selenium Sources, Levels, and Consequences in the Delta	Fed	U.S. Geological Survey	2780	1,589								1,191
98-B14	Bacterial Treatment of Selenium (Panoche Drainage)	N-P	University of California, Berkley	1149	1,149								
	Integrated Pest Management in Suisun Bay Program	Fed	U.S. Bureau of Reclamation	266	266								

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Ecosys

Total

Bay-Delta | Bay-Delta

Ecosys

Calif Urban

Other

Bay-Delta Bay-Delta Ecosys Ecosys

Resto

Account

(FY99)

0

Resto

Account

(FY98)

1,250

1,250

Calif Urban

Water

Assoc.

Prop 204 (CVPIA)

Ó

CVPIA

Prop 204

(Cat. III)

223

223

Other

Federal

Funding

Other

64

Other State

Funding

Total

Funding Pro

posed

287

1,250

1,537

Type

Applicant

University of California Sea Grant Extension Program

Federal - U.S. Fish and Wildlife

Service

Project Title

Preventing Exotic

Water

Program

Introductions From Ballast

Exotic Species Control

Category 7. Introduced and Undesirable Species Control

Total for Introduced and Undesirable Species Control:

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Project

No.

97-C07

98-F25

Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto . Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
Category	8. Improved Fish Management	and Ha	atcherys Operations										
	Developing a Genetic]	Department of Fish and Game	987			387		!		600		
98-C02	Culture of Delta Smelt	N-P	University of California, Davis	195			195				- 000		
98-B15		Priv	Northwest Marine Technology, Inc.	625	625								
Not Listed	Fish Harvest Research Program	CALFE D	CALFED Bay-Delta	500			500					_	
	Fish Hatchery Review Program	CALFE D	CALFED Bay-Delta	250			250						
98-C12	Genetic comparison of stocks considered for re- establishing steelhead in Clear Creek	Fed	US Fish and Wildlife Service	45			45						
	Spawning areas of green sturgeon in the upper Sacramento River	Fed	US Fish and Wildlife Service	61			61			·		,	
98-C14	Monitoring adult and juvenile spring and winter chinook salmon and steelhead in Battle Creek, CA	Fed	US Fish and Wildlife Service	150	-		. 150						
98-N03	Life History and Stock Composition of Steelhead Trout	Local	Yuba County Water Agency	120			120			-			
98-C15	Sacramento-San Joaquin Watershed	State	Joseph Cech/University of California	241			241						
Total for In	nproved Fish Management and	Hatch	ery Operations:	3,174	625	0	1,949	0	0	. 0	600	0	0
Category 9	Category 9. Watershed Management												
97-B01	Watershed Improvements/Sediment Stabilization (Deer, Mill, and Antelope Creeks)	Fed	U.S. Forest Service	440	371							69	

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Project No.	Project Title	Type	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
97-N05	Watershed Restoration Planning (Auburn Ravine and Coon Creek)	Local	Placer County	445	•		223						222
97-E01	Watershed Plan Big Chico Creek	Priv, N-	Big Chico Creek Watershed Alliance and California State University, Chico	423	-							423	
97-E02	Watershed Plan Deer Creek	State, N-P	Deer Creek Watershed Conservancy and California State University Research Foundation	428								197	231
98-F01 98-F02	Butte Creek Watershed	State, N-P	California State University, Chico	294	294								
98-B10	Inventory of Forest Road Systems at Cat Creek	Fed	U.S. Forest Service	38	38								
98-E01	Napa River Watershed Stewardship	Local	Napa County Resources Conservation District	456								250	206
	Sonoma Creek Watershed Restoration	Local	Southern Sonoma County Resource Conservation District	300		·						300	
	Watershed Restoration Planning and Implementation Program **	Fed	Environmental Protection Agency										
98-E04	Petaluma River Watershed Restoration Program	Local	Southern Sonoma County Resource Conservation District	220	119	43						58	
98-E05	Cottonwood Creek Watershed Group Formation	-	Cottonwood Creek Watershed Group	161	87	32						42	
98-E06	Battle Creek Watershed Stewardship		Battle Creek Watershed Conservancy	145	78	29						38	
98-E07	Local Watershed Stewardship: Steelhead Trout Plan		Friends of Corte Madera Creek Watershed	48	26	12						10	
98-E08	Cold Water Fisheries and Water Quality Element	Local	City of San Jose-Environmental Services Department	200	. 108	39						53	
98-E09	Merced River Corridor Restoration Plan	Local	Stillwater Sciences & Merced Co. Planning & Comm. Develp. Dept.	300	163	57						80	
98-E10	South Yuba River Coordinated Watershed Management Plan	State,	Department of Parks and Recreation	264	143	50	٠					71	
98-E11	Watershed Restoration Strategy for the Yolo Bypass		Yolo Basin Foundation, Inc.	244	132	48						64	

Project No.	Project Title	Type	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
98-E12	Proposal to Develop Local Watershed Stewardship Plan for the Lower Mokelumne River	Local	San Joaquin County Resource Conservation District	159	86	32						41	
98-E13	Union School Slough Watershed Improvement Program	N-P	Nation Audubon Society - California	636	344	118						174	
98-E14	American River Integrated Watershed Stewardship Strategy		Placer County Resource Conservation District	220	118	44						58	
98-E15	Sulphur Creek Coordinated Resource Management Planning Group		Sacramento Watersheds Action Group	24	13	7						4	
98-E16	Lower Putah Creek Watershed Stewardship Program		Solano County, Department of Environmental Management	101	55	. 21						25	
98-E17	CRMP Program	Local	Contra Costa Resource Conservation District	139	76							35	
Total for Wa	itershed Management:	5,685	2,251	560	223	j O	0	ļ · 0	0	1,992	659		

Note on Federal Funding: Provided through the U.S. Environmental Protection Agency's Watershed Program

 Federal
 Federal

 Bay-Del
 Bay-Del

 (FY98)
 (FY99)

 1,548
 560

 753

Added Watershed Restoration (EPA) Totals Per Column:

** Projects funded by Watershed program are being funded by three sources. Costs have been distributed

Sum of <u>Additional</u> Totals: 2,861

Project No.	Project Title	Туре	Applicant .	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
	10. Miscellaneous Expenses/A	dminis	tration/Education				•						·
Not Listed	Integrated Phasing Strategy	Fed	Bureau of Reclamation	1,647	1,647								
Not Listed	Coordinated Permitting	Fed	Bureau of Reclamation	282	282				·	,			
Not Listed	Program	Fed	Bureau of Reclamation	184	184								
Not Listed	Comprehensive and Coordinated Assessment	Fed	Bureau of Reclamation	1,157	1,157								
98-C10	Education Program	Fed	Bureau of Reclamation	0	•								
98-B30	San Joaquin Valley 'Salmonids in the Classroom' Program Enhancement	State	Department of Fish and Game	3	. 3	-							
98-B31	Traveling Film Festival/Heron Booth/Video		Independent Documentary Group	54	54								
98-B32	Environmental Agriculture Conferences and Field Tours		Committee for Sustainable Agriculture	28	28								
98-B33	Sacramento River, Headwaters to the Ocean, Public Information and Education		Sacramento River Discovery Center	50	50								i
98-B34	Discover the Flyway		Yolo Basin Foundation	49	49					 			
98-B35	The Butte Creek Watershed Educational Workshops and Field Tours Series	State	Dr. Donald Holtgrieve, CSU Chico	33	33				0				
98-B36	Bay-Delta Environmental Restoration Education Program		Water Education Foundation	40	40								
98-B37	The Virtual Science Center and Hands-on Learning Programs		The Delta Science Center at Big Break	42	42								
98-B38	Water Hyacinth Education Program	Local	Sacramento Regional County Sanitation District	10	2	8							

Project No.	Project Title	Туре	Applicant	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
98-B39	Water Challenge 2010	Fed	San Francisco Bay Model Visitor Center, US ACOE	64		64	·						
98-B40	Tuolumne River Natural Resources Program	Local	City of Modesto	44		44							
Not Listed	Restoration Reserve Fund	Fed	Bureau of Reclamation	3,319	3,319							,	
Not Listed	Technical Review/Quality Control Program	Fed	Bureau of Reclamation	850	850								
Not Listed	Administrative Support Program	Fed	Bureau of Reclamation	300	300								
Total for Miscellaneous Expenses/Administrative:			8,156	8,040	116	0	0	0	0) 0	0	0	

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Project No.	Project Title	Туре	Applicant ·	Total Funding Pro posed	Bay-Delta Ecosys Resto Account (FY98)	Bay-Delta Ecosys Resto Account (FY99)	Prop 204 (Cat. III)	Prop 204 (CVPIA)	CVPIA	Calif Urban Water Assoc.	Other State Funding	Other Federal Funding	Other
1. Total fo	r Fish Screen Improvement												
Total for Fish Passage Improvements				35,835	2,540	ol	7,705	16,500	1 101	4 750		· 	
Total for Habitat Restoration in Floodplains and Marshes				13,152	8,741	0	434	10,500	4,481	1,753		1,917	717
Total of River Channel Changes				61,023	32,842	2,681	4,541	- 0	- 0	2,986		150	841
5. Total for Improved Instream Flows			37,600	9,624	2,001	19,193	0	656	2,801	425	9,433	7,644	
			14,500	14,500			0	182	0	47	0	8,554	
6. Total for Water Quality and Temperature Improvements				17,067	5,003		0	0	0	0	0	0	-,,
7. Total for Introduced and Undesirable Species Control				1,537	1,250		9,018	0	0	0	103	0	2,943
8. Total for	Total for Improved Fish Management and Hatchen Operations					0	223	0	0	0	0	0	64
9. Total for	Total for Watershed Management Total for Miscellaneous Expenses/Administrative			3,174	625	0	1,949	0	0	0	600	- 0	- 04
Total for				5,685	2,251	560	223	0	0	0	0	1,992	
Summary Total:				8,156	8,040	116	0	0	0	ő	- 0	1,992	659
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